

-1- (JAPIO)

ACCESSION NUMBER  
TITLE

85-262354  
NEGATIVE ALLOY POWDER FOR MERCURY-FREE ALKALINE  
BATTERY

PATENT APPLICANT  
INVENTORS

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85.12.25 J60262354, JP 60-262354

APPLICATION DETAILS

84.06.07 84JP-115482, 59-115482

SOURCE

86.05.17 SECT. E, SECTION NO. 404; VOL. 10, NO. 133,  
PG. 49.

INT'L PATENT CLASS

H01M-004/42; H01M-004/12; C22C-018/00

JAPIO CLASS

42.9 (ELECTRONICS--Other); 12.2 (METALS--Metallurgy  
Heat Treating); 12.3 (METALS--Alloys)

ABSTRACT

PURPOSE: To obtain a negative zinc alloy powder free  
of mercury which has great ability to suppress  
hydrogen gas generation by restricting the content of  
lead and the variation in the content of lead to  
within specified ranges.

CONSTITUTION: The content of lead in a zinc alloy  
powder is adjusted to 0.01- 0.10wt% and the  
difference between the maximum and the minimum  
contents of lead is adjusted to 0.002wt%. When the  
amount of lead is less than 0.01wt% of the total  
amount of the zinc alloy, it has only insufficient  
ability to suppress hydrogen generation. While, when  
it exceeds 0.10wt% of the total amount of the zinc  
alloy, the heavy load characteristic and the  
utilization rate of the battery are deteriorated. It  
is necessary that the difference between the maximum  
and the minimum contents of lead be 0.002wt%. When  
this difference exceeds the above specified level,  
the alloy has decreased ability to suppress hydrogen  
gas generation even when the content of lead in the  
alloy is properly set.